

# STR-DE315/DE415

## SERVICE MANUAL

AEP Model  
UK Model



Photo : STR-DE415 model

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### SPECIFICATIONS

#### Amplifier section

##### Power output

**Stereo mode** (DIN 1kHz, 4ohms)

STR-DE415 :  
80W + 80W

STR-DE315 :  
80W + 80W

##### Surround mode

(DIN 1kHz, 4ohms)

Front :  
STR-DE415 : 70W/ch  
STR-DE315 : 60W/ch

Center :  
STR-DE415 : 70W  
STR-DE315 : 60W  
(only in PROLOG  
MODE)

Rear :  
STR-DE415 :  
(DIN 1kHz, 4ohms)  
70W  
STR-DE315 :  
(DIN 1kHz, 4ohms)  
60W

##### Frequency response

PHOTO : RIAA  
equalization curve  
± 0.5dB  
TV/LD, CD, TAPE/MD,  
VIDEO :  
10Hz - 50kHz ± 1dB

#### Inputs

	Sensitivity	Impedance	S/N (Weighting network, input level)
<b>PHONO (MM)</b>	2.5mV	50 Kilohms	74dB 72dB*** (A, 2.5mV)
<b>CD,</b>	200mV	50 Kilohms	82dB 82dB*** (A, 150mV)
<b>TAPE/MD, TV/LD, VIDEO</b>	150mV		

#### Output

TAPE/MD REC OUT :  
Voltage : 150mV,  
Impedance : 10 kilohms  
VIDEO AUDIO OUT :  
Voltage : 150mV,  
Impedance : 10 kilohms  
MIX AUDIO  
OUT (STR-DE415 only)  
Voltage : 2V  
Impedance : 10 kilohms  
PHONES : Accepts low  
and high impedance  
headphones

#### Muting

Full mute

#### BASS BOOST

+ 10dB at 70Hz

#### TONE

± 8dB at 100Hz and  
10kHz

#### FM tuner section

**Tuning range** 87.5 - 108.0MHz (OTHER)  
65.0 - 74.0MHz  
(East European)

#### Aerial range

75ohms, unbalanced

#### Sensitivity

Mono : 18.3 dBf, 2.2µV  
/75ohms  
Stereo : 38.3 dBf, 22.5µV  
/75ohms

#### Usable sensitivity

11.2 dBf, 1µV  
/75ohms (IHF)

#### S/N

Mono : 76dB  
Stereo : 70dB

#### Harmonic distortion at 1kHz

Mono : 0.3%  
Stereo : 0.5%

#### Separation

45dB at 1kHz

#### Frequency response

30Hz - 15kHz  $\pm 0.5$  dB  
— Continued on next page —

## FM STEREO/FM-AM RECEIVER



# SONY®



<b>Selectivity</b>	60dB at 400kHz
<b>AM tuner section</b>	
<b>Tuning range</b>	522 - 1611 kHz
<b>Aerial</b>	Loop aerial
<b>Usable sensitivity</b>	50dB/m (at 999kHz)
<b>S/N</b>	54dB (at 50mV/m)
<b>Harmonic distortion</b>	0.5% (50mV/m, 400Hz)
<b>Selectivity</b>	35dB
<b>General system</b>	Tuner section : PLL quartz-locked digital synthesizer system Preamplifier section : Low-noise NF type equalizer Power amplifier section : Pure-complimentary SEPP
<b>Power requirements</b>	230VAC, 50/60Hz
<b>Power consumption</b>	STR-DE415 : 175W STR-DE315 : 175W
<b>AC outputs</b>	Switched 100W (except for the U.K. model)
<b>Dimensions</b>	430 × 145 × 295mm
<b>Mass (Approx.)</b>	6.4kg
<b>Supplied accessories</b>	FM wire aerial (1) AM loop aerial (1) Remote controller (remote) (1) Size AA (R6) batteries (2) Scart adaptor (1)

Design and specifications are subject to change without notice.

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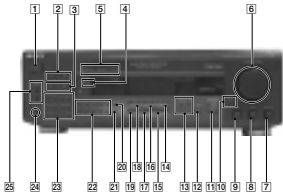
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## SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK  OR DOTTED LINE WITH MARK  ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

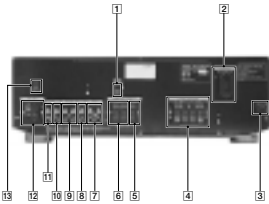
## SECTION 1 GENERAL

### LOCATION AND FUNCTION OF CONTROLS -FRONT-



- |                                      |                           |
|--------------------------------------|---------------------------|
| 1 POWER switch                       | 14 TAPE/MD button         |
| 2 CENTER LEVEL +, - buttons          | 15 PHONO button           |
| 3 REAR LEVEL +, - buttons            | 16 TV/LD button           |
| 4 STANDBY indicator                  | 17 TUNER button           |
| 5 FUNCTION indicators                | 18 VIDEO button           |
| 6 MASTER VOLUME control              | 19 CD button              |
| 7 BALANCE control                    | 20 DIRECT button          |
| 8 TREBLE control                     | 21 SHIFT button           |
| 9 BASS control                       | 22 Numeric buttons        |
| 10 BASS BOOST button/indicator       | 23 Tuner control buttons  |
| 11 SURROUND ON/OFF button            | 24 PHONES jack            |
| 12 MODE button                       | 25 SPEAKERS (A/B) buttons |
| 13 EFFECT/DELAY TIME, SET UP buttons |                           |

### -REAR-



- |                              |                    |
|------------------------------|--------------------|
| 1 WOOFER                     | 8 TV/LD            |
| 2 AC OUTLET (EXCEPT UK)      | 9 TAPE/MD          |
| 3 AC power cord              | 10 CD              |
| 4 FRONT SPEAKERS (A/B)       | 11 PHONO           |
| 5 SURROUND SPEAKERS (CENTER) | 12 ANTENNA (FM/AM) |
| 6 SURROUND SPEAKERS (REAR)   | 13 SIGNAL GND      |
| 7 VIDEO                      |                    |

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## SECTION 2 EXPLANATION OF IC TERMINALS

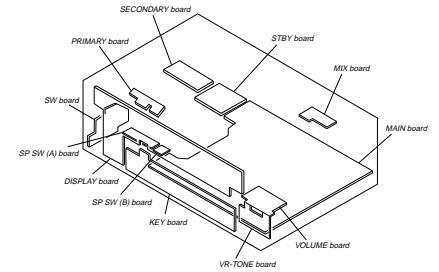
### • IC201 $\mu$ PD78044FGF-064-3B9

Pin No.	Pin Name	IO	Description
1	DIG7	O	
2	DIG6	O	
3	DIG5	O	
4	DIG4	O	Fluorescent indicator tube drive.
5	DIG3	O	
6	DIG2	O	
7	DIG1	O	
8	+5V	—	Power supply (+5V).
9	S CLK	I	System clock.
10	S DATA	I	System data.
11	PLL DATA	I	PLL data input from TU001.
12	S CH LCT288	O	Chip enable output.
13	S CE(LVTR)	O	Chip enable output.
14	REAR-R	I	Input for model select.
15	BRIDGE	I	Protector detect input.
16	PROTECT	I	Protector detect input.
17	RESET	I	System reset terminal.
18	AUTO STOP	I	Auto stop detect input.
19	STEREO IN	I	Stereo detect input.
20	AVss	—	Ground.
21	SP-RY	O	Speaker relay drive.
22	SURR-RY	O	Surround Relay.
23	POWER-RY	O	Power relay drive.
24	AVss	—	Ground.
25	SIGNAL	I	A/D signal input terminal.
26	A/D3	I	A/D3 key input terminal.
27	A/D2	I	A/D2 key input terminal.
28	A/D1	I	A/D1 key input terminal.
29	AVDD	—	Power supply (+5V).
30	AV REF	—	Reference voltage (+5V).
31	GND	—	Ground.
32	NC	—	Not used (Open).
33	Vss	—	Ground.
34	X1	I	System clock (4.19MHz).
35	X2	O	System clock (4.19MHz).
36	IC MUTE	O	Main drive output for $\mu$ PD2581V (IC701).
37	PHOTO LOGIC	O	Phologic LED.
38	SIMULATED	O	CINEMA STUDIO LED.
39	HALL LED	O	
40	T MUTE	O	Tuner mute drive output.

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## SECTION 3 DIAGRAMS

### 3-1. CIRCUIT BOARDS LOCATION



Pin No.	Pin Name	IO	Description
41	VOLUME UP	O	Volume up.
42	VOLUME DOWN	O	Volume down.
43	STANDBY	O	Standby LED drive.
44	SYS. POWER	I	System power ON/OFF.
45	RDS DATA IN	I	RDS data input.
46	RDS CLK IN	I	RDS clock input.
47	STOP	I	Stop signal input from NDM2103D (IC550).
48	Vss	—	Ground.
49	SBCS	I	Slices signal input.
50	POWER SW	I	Power switch input terminal.
51	5.1ch LED	—	5.1ch LED drive.
52	+5V	—	Power supply (+5V).
53	BASS BOOST	I	Bass boost LED drive.
54	FUNC. MUTE	O	Line mute drive.
55	SL MUTE	O	SL mute drive.
56	VERSION	I	Input for model select.
57	K14	I	Key in 4.
58	K13	I	Key in 3.
59	K12	I	Key in 2.
60	K11	I	Key in 1.
61	SR MUTE	O	SR mute drive.
62	S15	O	Key out 15.
63	S14	O	Key out 14.
64	S13	O	Key out 13.
65	S12	O	Key out 12.
66	S11	O	Key out 11.
67	S10	O	Key out 10.
68	S9	O	Key out 9.
69	S8	O	Key out 8.
70	S7	O	Key out 7.
71	VLOAD	—	Control line -24V.
72	S6	O	Key out 6.
73	S5	O	Key out 5.
74	S4	O	Key out 4.
75	S3	O	Key out 3.
76	S2	O	Key out 2.
77	S1	O	Key out 1.
78	DIG10	O	
79	DIG9	O	Fluorescent indicator tube drive.
80	DIG8	O	

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— 6 —



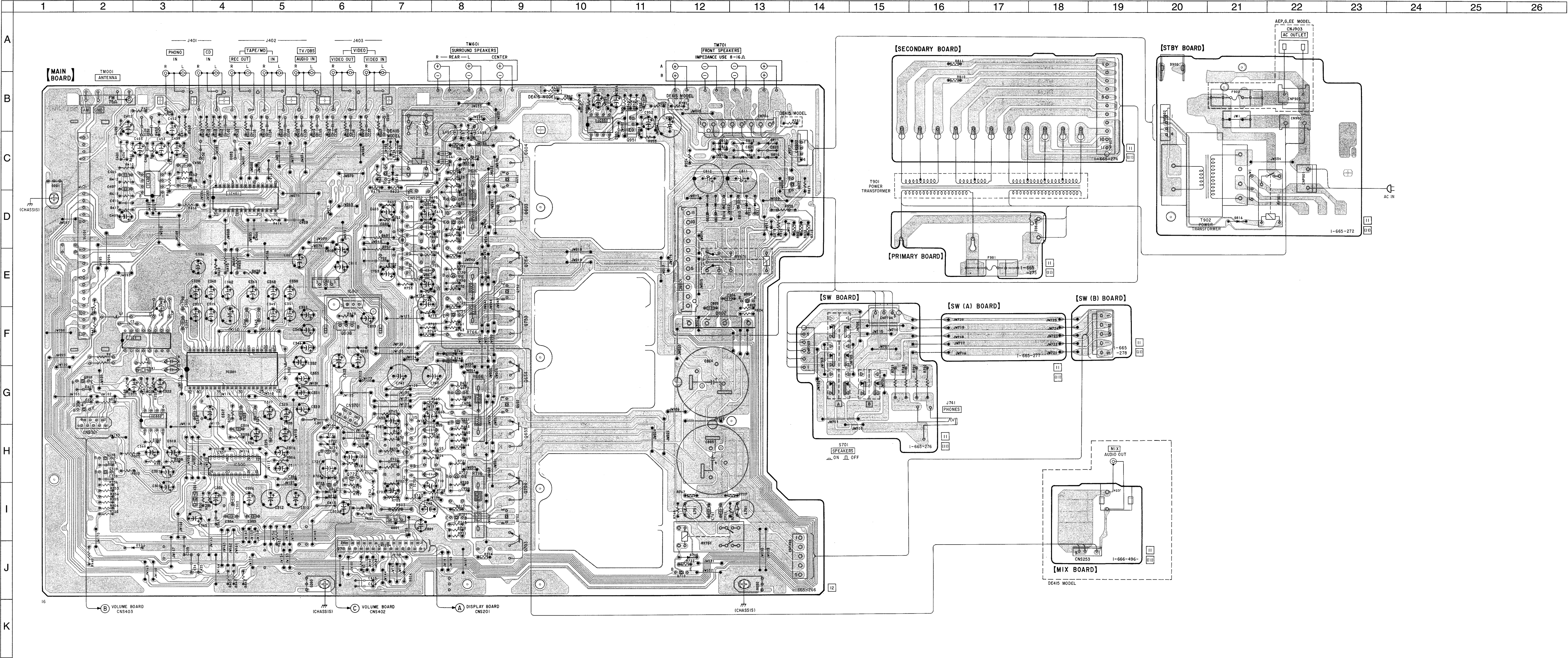
STR-DE315/DE415

3-2. PRINTED WIRING BOARDS — MAIN SECTION —

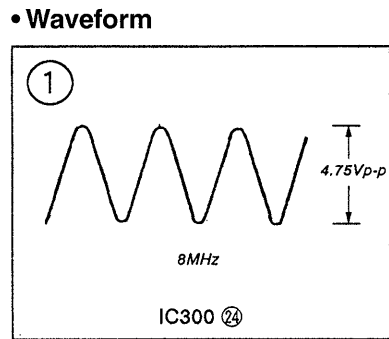
• Semiconductor Location			
Ref. No.	Location	Ref. No.	Location
D610	C-7	Q303	H-2
D710	J-12	Q304	G-2
D721	H-6	Q307	G-2
D722	H-6	Q308	H-2
D723	I-6	Q601	D-8
D724	I-6	Q602	C-9
D725	I-6	Q603	D-9
D801	I-6	Q604	C-9
D802	F-12	Q610	C-7
D804	J-7	Q620	D-8
D810	C-13	Q651	H-8
D811	C-13	Q652	G-9
D812	C-13	Q653	H-9
D813	C-13	Q654	G-9
D814	C-12	Q670	G-8
D815	C-12	Q701	I-8
D816	D-21	Q702	I-9
D817	F-6	Q703	I-9
D818	D-13	Q704	I-9
D820	D-13	Q710	J-12
D821	D-13	Q720	H-8
D822	D-12	Q721	H-6
D823	D-12	Q722	I-6
D901	J-2	Q723	I-6
		Q751	F-8
IC1	F-3	Q752	E-9
IC300	H-4	Q753	F-9
IC301	G-4	Q754	E-9
IC302	G-3	Q770	E-8
IC401	D-4	Q801	I-7
IC402	D-3	Q802	D-14
IC701	H-7	Q808	F-6
IC702	E-7	Q809	F-13
IC801	E-6	Q951	B-11
IC802	E-6		
IC950	B-10		

Note:


- — : Parts extracted from the component side.
- — : Pattern on the side which is seen.
- Abbreviation
- EE : East European
- G : German

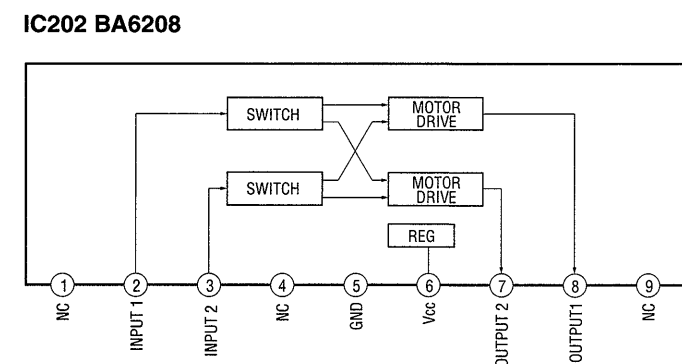
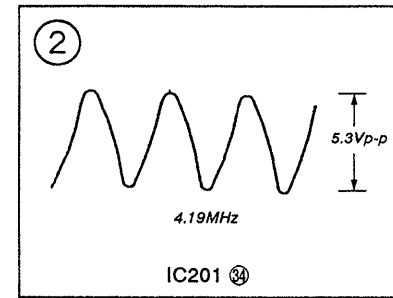
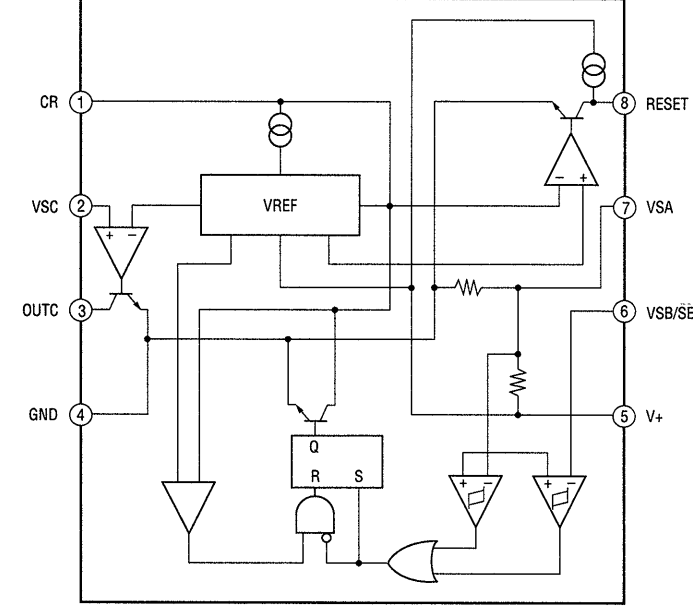
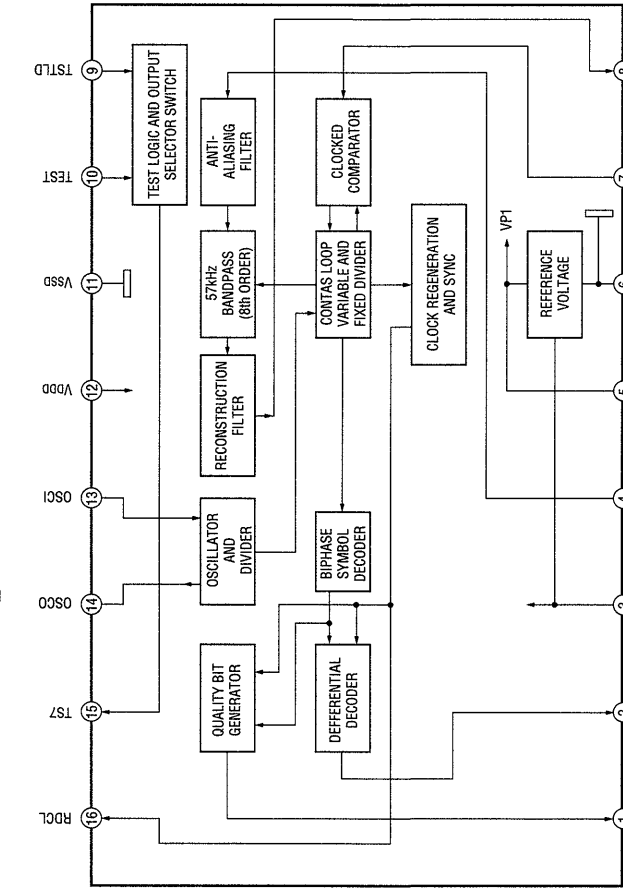
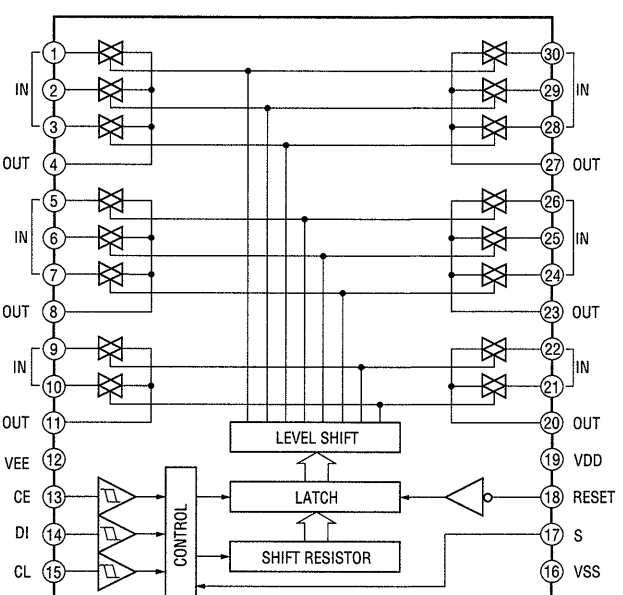
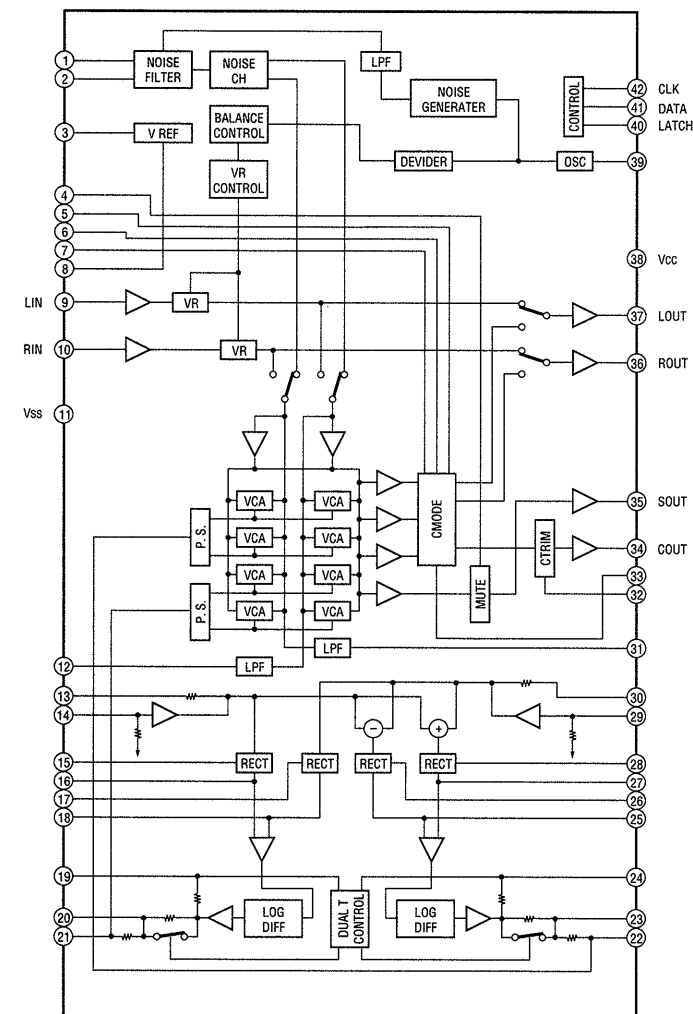
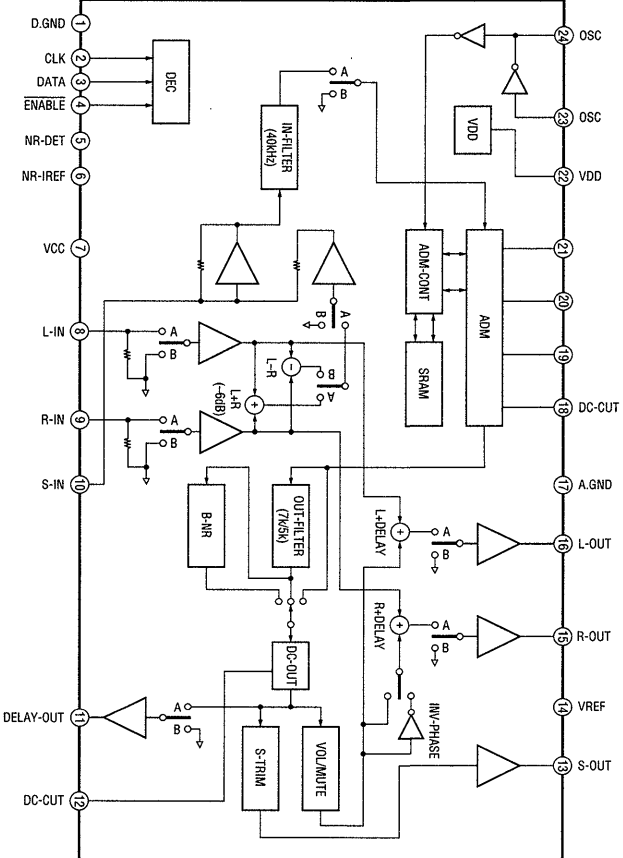
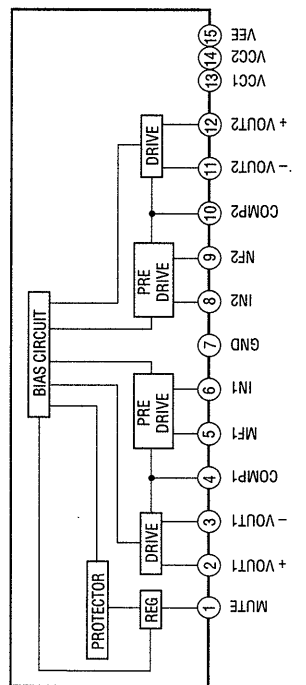






- All capacitors are in  $\mu\text{F}$  unless otherwise noted.  $\text{pF}$ :  $\mu\text{F}$  50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in  $\Omega$  and  $1/4\text{W}$  or less unless otherwise specified.
- $\Delta$  : Internal component.
- $\boxed{+}$  : B+ Line.
- $\boxed{-}$  : B- Line.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.  
No mark: FM  
( ) : AM
- Voltages are taken with a VOM (input impedance  $10\text{M}\Omega$ ).  
Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with an oscilloscope.  
Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.  
 $\Rightarrow$  : FM
- Abbreviation  
G : German  
EE : East European

The components identified by mark  or dotted line with mark  are critical for safety.  
Replace only with part number specified.

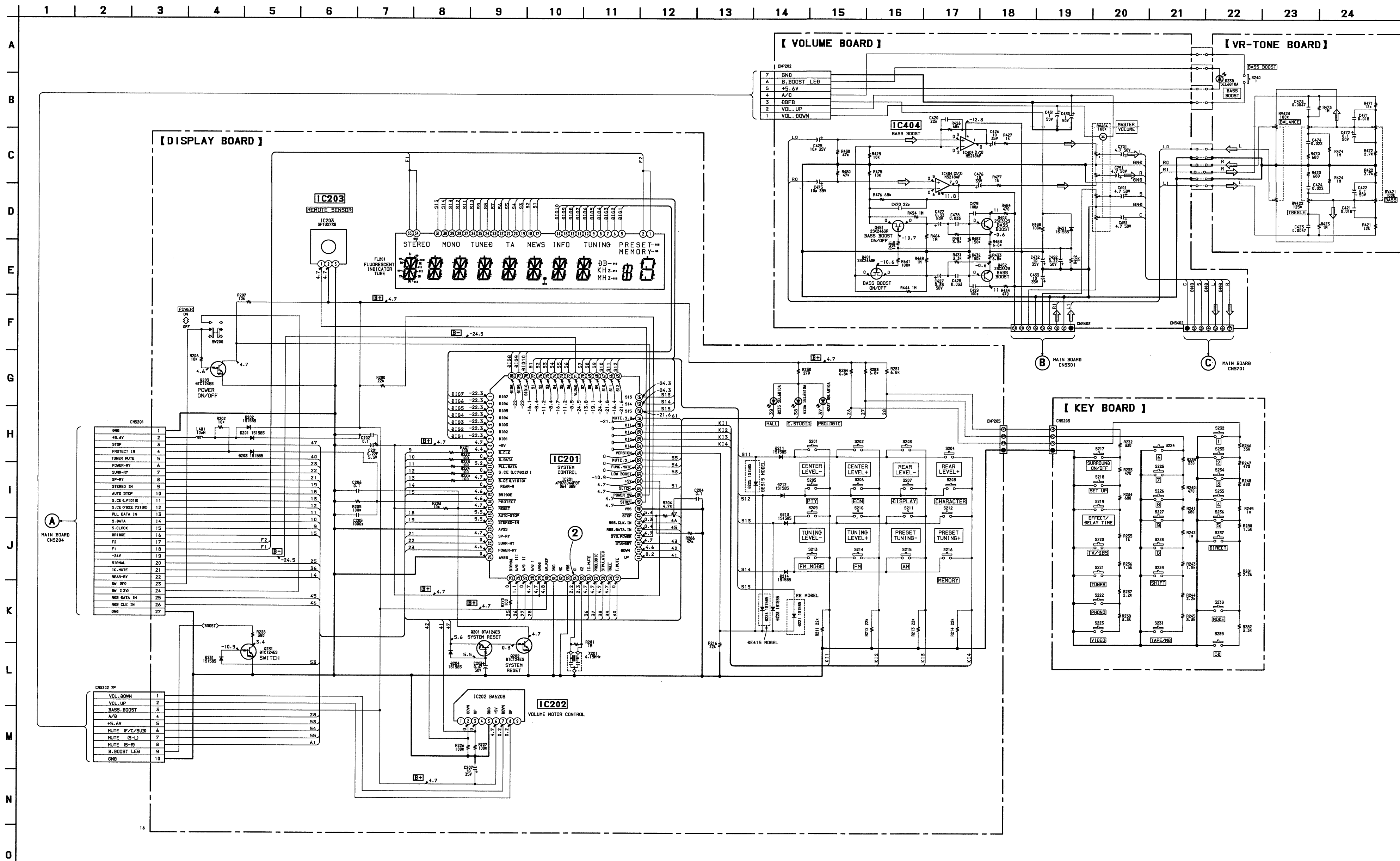


- All capacitors are in  $\mu\text{F}$  unless otherwise noted. pF:  $\mu\text{F}$  50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in  $\Omega$  and  $1/4\text{W}$  or less unless otherwise specified.
- $\Delta$  : Internal component.
- $\boxed{+}$  : + Line.
- $\boxed{-}$  : - Line.
- Voltages and waveforms are dc with respect to ground under no-signal conditions.

No mark: FM

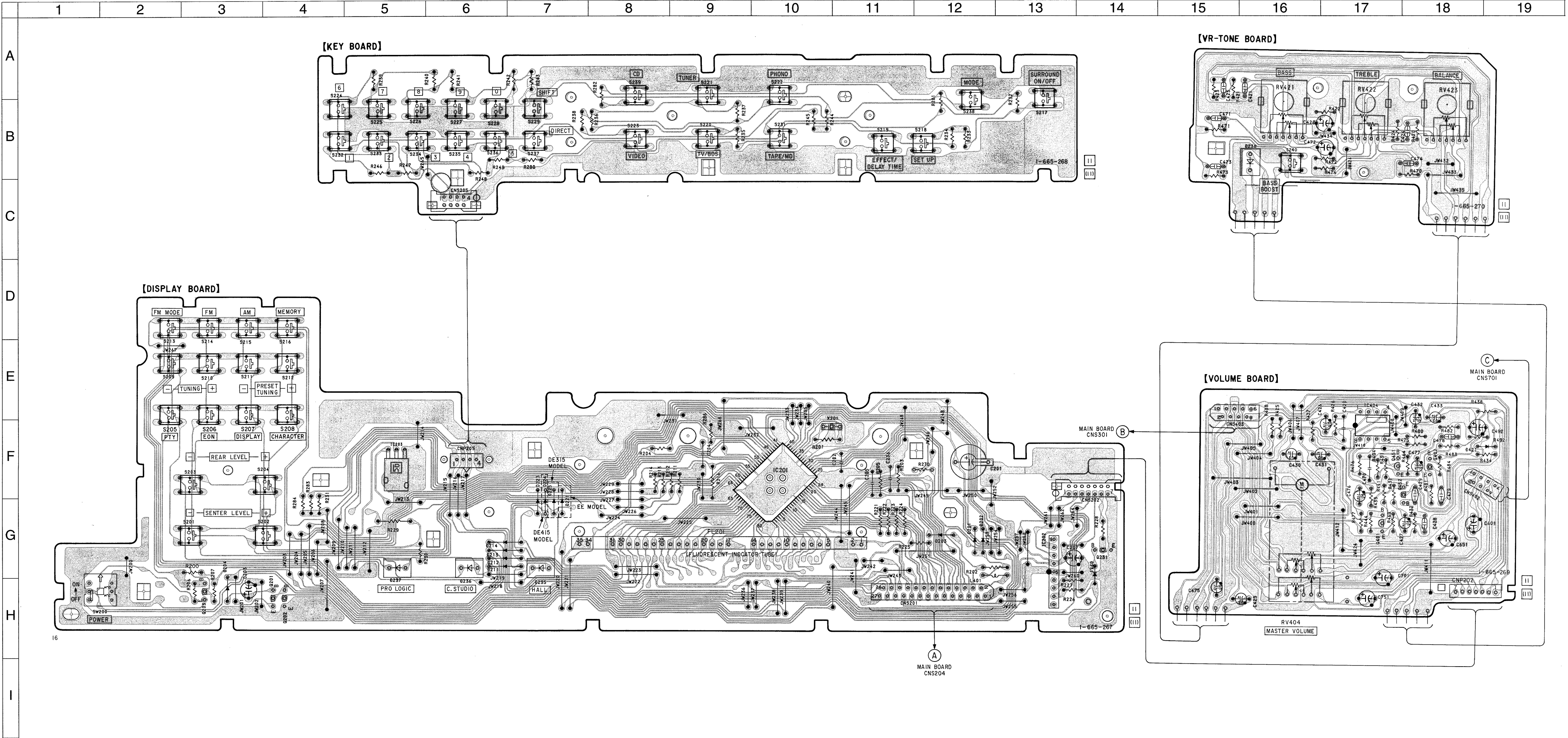
- Voltages are taken with a VOM (Input impedance 10M $\Omega$ ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with an oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.  $\Rightarrow$  : FM
- Abbreviation  
EE : East European

### 3-4. SCHEMATIC DIAGRAM — DISPLAY SECTION —





3-5. PRINTED WIRING BOARDS — DISPLAY SECTION —



• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D201	G-12	D238	B-16
D202	G-12	D421	F-18
D203	G-12		
D204	H-3	IC201	F-10
D211	G-7	IC202	G-13
D212	G-7	IC203	F-5
D213	G-7	IC404	E-17
D214	G-7		
D221	F-7	Q201	H-4
D223	F-7	Q202	H-4
D224	F-7	Q203	H-3
D225	F-7	Q231	G-14
D231	G-14	Q401	G-17
D235	G-7	Q402	F-18
D236	G-6	Q451	F-17
D237	G-5	Q452	F-17

Note:  
• : Parts extracted from the component side.  
• : Pattern on the side which is seen.  
• Abbreviation  
EE : East European





Ref. No.	Part No.	Description			Remarks	Ref. No.	Part No.	Description			Remarks
C345	1-136-165-00	FILM	0.1uF	5%	50V	C721	1-126-923-11	ELECT	220uF	20%	10V
C346	1-126-959-11	ELECT	0.47uF	20%	50V	C722	1-126-964-11	ELECT	10uF	20%	50V
C347	1-126-963-11	ELECT	4.7uF	20%	50V	C740	1-128-562-11	ELECT	47uF	20%	100V
C348	1-126-959-11	ELECT	0.47uF	20%	50V	C741	1-128-562-11	ELECT	47uF	20%	100V
C349	1-126-963-11	ELECT	4.7uF	20%	50V	C742	1-126-925-11	ELECT	470uF	20%	10V
C350	1-124-250-11	ELECT	0.15uF	20%	50V	C743	1-126-925-11	ELECT	470uF	20%	10V
C351	1-126-962-11	ELECT	3.3uF	20%	50V	C752	1-162-282-31	CERAMIC	100PF	10%	50V
C352	1-124-250-11	ELECT	0.15uF	20%	50V	C753	1-126-933-11	ELECT	100uF	20%	10V
C353	1-164-159-21	CERAMIC	0.1uF		50V	C755	1-102-233-00	CERAMIC	33PF	10%	500V
C354	1-164-159-21	CERAMIC	0.1uF		50V	C760	1-126-967-11	ELECT	47uF	20%	16V
C355	1-164-159-21	CERAMIC	0.1uF		50V	C761	1-137-372-11	FILM	0.022uF	5%	50V
C356	1-164-159-21	CERAMIC	0.1uF		50V	C770	1-162-286-21	CERAMIC	220PF	10%	50V
C357	1-164-159-21	CERAMIC	0.1uF		50V	C799	1-164-159-21	CERAMIC	0.1uF		50V
C359	1-126-963-11	ELECT	4.7uF	20%	50V	C801	1-104-664-11	ELECT	47uF	20%	25V
C360	1-126-963-11	ELECT	4.7uF	20%	50V	C802	1-104-664-11	ELECT	47uF	20%	25V
C363	1-164-159-21	CERAMIC	0.1uF		50V	C803	1-128-506-11	ELECT	6800uF	20%	50V
C365	1-126-966-11	ELECT	33uF	20%	16V	C804	1-128-506-11	ELECT	6800uF	20%	50V
C366	1-164-159-21	CERAMIC	0.1uF		50V	C805	1-130-781-00	FILM	0.22uF	10%	100V
C401	1-162-286-21	CERAMIC	220PF	10%	50V	C806	1-130-781-00	FILM	0.22uF	10%	100V
C402	1-126-962-11	ELECT	3.3uF	20%	50V	C807	1-104-664-11	ELECT	47uF	20%	25V
C403	1-126-966-11	ELECT	33uF	20%	16V	C808	1-104-664-11	ELECT	47uF	20%	25V
C404	1-162-282-31	CERAMIC	100PF	10%	50V	C809	1-126-960-11	ELECT	1uF	20%	50V
C405	1-137-459-11	FILM	0.0056uF	5%	100V	C810	1-126-960-11	ELECT	1uF	20%	50V
C406	1-164-159-21	CERAMIC	0.1uF		50V	C811	1-126-942-61	ELECT	1000uF	20%	25V
C407	1-137-365-11	FILM	0.0015uF	5%	50V	C812	1-126-942-61	ELECT	1000uF	20%	25V
C408	1-162-294-31	CERAMIC	0.001uF	10%	50V	C813	1-101-001-00	CERAMIC	0.001uF		50V
C409	1-126-962-11	ELECT	3.3uF	20%	50V	C814	1-101-001-00	CERAMIC	0.001uF		50V
C410	1-164-159-21	CERAMIC	0.1uF		50V	C820	1-161-494-00	CERAMIC	0.022uF		25V
C412	1-162-291-31	CERAMIC	560PF	10%	50V	C821	1-161-494-00	CERAMIC	0.022uF		25V
C413	1-164-159-21	CERAMIC	0.1uF		50V	C822	1-104-664-11	ELECT	47uF	20%	25V
C415	1-164-159-21	CERAMIC	0.1uF		50V	C823	1-104-664-11	ELECT	47uF	20%	25V
C416	1-164-159-21	CERAMIC	0.1uF		50V	C950	1-126-767-11	ELECT	1000uF	20%	16V
C434	1-162-286-21	CERAMIC	220PF	10%	50V	C951	1-164-097-11	CERAMIC	0.022uF		50V
C435	1-162-286-21	CERAMIC	220PF	10%	50V	C952	1-126-960-11	ELECT	1uF	20%	50V
C451	1-162-286-21	CERAMIC	220PF	10%	50V	C953	1-124-464-11	ELECT	0.22uF	20%	50V
C452	1-126-962-11	ELECT	3.3uF	20%	50V	C954	1-126-096-11	ELECT	10uF	20%	35V
C453	1-126-966-11	ELECT	33uF	20%	16V	C955	1-164-159-21	CERAMIC	0.1uF		50V
C454	1-162-282-31	CERAMIC	100PF	10%	50V	CC01	1-162-282-31	CERAMIC	100PF	10%	50V
C455	1-137-459-11	FILM	0.0056uF	5%	100V	CC02	1-162-282-31	CERAMIC	100PF	10%	50V
C457	1-137-365-11	FILM	0.0015uF	5%	50V	CC03	1-162-282-31	CERAMIC	100PF	10%	50V
C459	1-126-962-11	ELECT	3.3uF	20%	50V	CC04	1-162-282-31	CERAMIC	100PF	10%	50V
C460	1-164-159-21	CERAMIC	0.1uF		50V	CC05	1-162-282-31	CERAMIC	100PF	10%	50V
C602	1-162-282-31	CERAMIC	100PF	10%	50V	CC06	1-162-282-31	CERAMIC	100PF	10%	50V
C603	1-126-933-11	ELECT	100uF	20%	10V	CC07	1-162-282-31	CERAMIC	100PF	10%	50V
C605	1-102-233-00	CERAMIC	33PF	10%	500V	CC51	1-162-282-31	CERAMIC	100PF	10%	50V
C610	1-126-967-11	ELECT	47uF	20%	16V	CC52	1-162-282-31	CERAMIC	100PF	10%	50V
C611	1-137-372-11	FILM	0.022uF	5%	50V	CC53	1-162-282-31	CERAMIC	100PF	10%	50V
C620	1-162-286-21	CERAMIC	220PF	10%	50V	CC54	1-162-282-31	CERAMIC	100PF	10%	50V
C652	1-162-282-31	CERAMIC	100PF	10%	50V	CC55	1-162-282-31	CERAMIC	100PF	10%	50V
C653	1-126-933-11	ELECT	100uF	20%	10V	CC56	1-162-282-31	CERAMIC	100PF	10%	50V
C655	1-102-233-00	CERAMIC	33PF	10%	500V	CC57	1-162-282-31	CERAMIC	100PF	10%	50V
C660	1-126-967-11	ELECT	47uF	20%	16V	< CONNECTOR >					
C661	1-137-372-11	FILM	0.022uF	5%	50V	CNP702	1-750-388-11	PIN, CONNECTOR 5P			
C670	1-162-286-21	CERAMIC	220PF	10%	50V	CNP706	1-764-477-11	PIN, CONNECTOR (PC BOARD) 8P			
C702	1-162-282-31	CERAMIC	100PF	10%	50V	CNS204	1-569-327-11	SOCKET, CONNECTOR 27P			
C703	1-126-933-11	ELECT	100uF	20%	10V	CNS301	1-568-442-11	SOCKET, CONNECTOR 9P			
C705	1-102-233-00	CERAMIC	33PF	10%	500V	CNS701	1-568-439-11	SOCKET, CONNECTOR 7P			
C710	1-126-967-11	ELECT	47uF	20%	16V						
C711	1-137-372-11	FILM	0.022uF	5%	50V	CNS802	1-770-480-11	SOCKET, CONNECTOR PIN 4P			
C720	1-162-286-21	CERAMIC	220PF	10%	50V						

Ref. No.	Part No.	Description	Remarks
< DIODE >			
D610	8-719-815-85	DIODE 1S1585	
D710	8-719-815-85	DIODE 1S1585	
D721	8-719-815-85	DIODE 1S1585	
D722	8-719-815-85	DIODE 1S1585	
D723	8-719-815-85	DIODE 1S1585	
D724	8-719-815-85	DIODE 1S1585	
D725	8-719-815-85	DIODE 1S1585	
D801	8-719-002-33	DIODE UZL-24L	
D802	8-719-302-38	DIODE RBV-602-01	
D804	8-719-010-38	DIODE UZ-5.1BSB	
D810	8-719-200-82	DIODE 11ES2	
D811	8-719-200-82	DIODE 11ES2	
D812	8-719-200-82	DIODE 11ES2	
D813	8-719-200-82	DIODE 11ES2	
D814	8-719-815-85	DIODE 1S1585	
D815	8-719-815-85	DIODE 1S1585	
D817	8-719-001-31	DIODE UZL-9H3-TA	
D818	8-719-815-85	DIODE 1S1585	
D820	8-719-200-82	DIODE 11ES2	
D821	8-719-200-82	DIODE 11ES2	
D822	8-719-200-82	DIODE 11ES2	
D823	8-719-200-82	DIODE 11ES2	
D901	8-719-815-85	DIODE 1S1585	
< TERMINAL >			
* G200	1-537-738-21	TERMINAL, EARTH	
* G201	1-537-738-21	TERMINAL, EARTH	
* G202	1-537-738-21	TERMINAL, EARTH	
< IC >			
IC1	8-759-450-86	IC BU1922	
IC300	8-759-442-97	IC LV1016	
IC301	8-759-442-96	IC LA2786	
IC302	8-759-636-74	IC M5218AP-22	
IC401	8-759-805-14	IC LC7822	
IC402	8-759-636-74	IC M5218AP-22	
IC701	8-759-326-52	IC uPC2581V	
IC702	8-759-326-52	IC uPC2581V	
IC801	8-759-231-58	IC TA7812S	
IC802	8-759-604-45	IC M5F79M12	
IC950	8-759-333-83	IC NJM2103D	
< JACK >			
J401	1-770-614-11	JACK, PIN 4P (PHONO/CD)	
J402	1-770-015-11	JACK, PIN 6P (TAPE/MD,TV DBS AUDIO IN)	
J403	1-770-614-11	JACK, PIN 4P (VIDEO)	
< COIL >			
L1	1-410-521-11	INDUCTOR 100uH	
L301	1-410-509-11	INDUCTOR 10uH	
L302	1-410-509-11	INDUCTOR 10uH	
L601	1-420-872-00	COIL, AIR-CORE	
L651	1-420-872-00	COIL, AIR-CORE	
L701	1-420-872-00	COIL, AIR-CORE	
L751	1-420-872-00	COIL, AIR-CORE	

Ref. No.	Part No.	Description	Remarks
< TRANSISTOR >			
Q303	8-729-922-37	TRANSISTOR 2SD2144S	
Q304	8-729-922-37	TRANSISTOR 2SD2144S	
Q307	8-729-922-37	TRANSISTOR 2SD2144S	
Q308	8-729-922-37	TRANSISTOR 2SD2144S	
Q601	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q602	8-729-141-30	TRANSISTOR 2SC3623A-LK	
Q603	8-749-010-25	IC MN2488-OPY-M	
Q604	8-749-010-26	IC MP1620-OPY-M	
Q610	8-729-119-78	TRANSISTOR 2SC403SP-51	
Q620	8-729-140-82	TRANSISTOR 2SA988-PAFAEA	
Q651	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q652	8-729-141-30	TRANSISTOR 2SC3623A-LK	
Q653	8-749-010-25	IC MN2488-OPY-M	
Q654	8-749-010-26	IC MP1620-OPY-M	
Q670	8-729-140-82	TRANSISTOR 2SA988-PAFAEA	
Q701	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q702	8-729-141-30	TRANSISTOR 2SC3623A-LK	
Q703	8-749-010-25	IC MN2488-OPY-M	
Q704	8-749-010-26	IC MP1620-OPY-M	
Q710	8-729-119-78	TRANSISTOR 2SC403SP-51	
Q720	8-729-140-82	TRANSISTOR 2SA988-PAFAEA	
Q721	8-729-140-82	TRANSISTOR 2SA988-PAFAEA	
Q722	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA	
Q723	8-729-119-78	TRANSISTOR 2SC403SP-51	
Q751	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q752	8-729-141-30	TRANSISTOR 2SC3623A-LK	
Q753	8-749-010-25	IC MN2488-OPY-M	
Q754	8-749-010-26	IC MP1620-OPY-M	
Q770	8-729-140-82	TRANSISTOR 2SA988-PAFAEA	
Q801	8-729-140-97	TRANSISTOR 2SB734-34	
Q802	8-729-119-78	TRANSISTOR 2SC403SP-51	
Q808	8-729-180-92	TRANSISTOR 2SD809-K	
Q809	8-729-119-78	TRANSISTOR 2SC403SP-51	
Q951	8-729-030-18	TRANSISTOR 2SD2525	
< RESISTOR >			
R5	1-249-421-11	CARBON 2.2K 5%	1/4W F
R6	1-247-807-31	CARBON 100 5%	1/4W
R7	1-247-807-31	CARBON 100 5%	1/4W
R300	1-247-903-00	CARBON 1M 5%	1/4W
R301	1-249-421-11	CARBON 2.2K 5%	1/4W F
R302	1-249-421-11	CARBON 2.2K 5%	1/4W F
R303	1-249-439-11	CARBON 68K 5%	1/4W
R304	1-249-441-11	CARBON 100K 5%	1/4W
R306	1-249-436-11	CARBON 39K 5%	1/4W
R307	1-247-862-11	CARBON 20K 5%	1/4W
R308	1-249-421-11	CARBON 2.2K 5%	1/4W F
R309	1-249-421-11	CARBON 2.2K 5%	1/4W F
R352	1-249-441-11	CARBON 100K 5%	1/4W
R353	1-249-425-11	CARBON 4.7K 5%	1/4W F
R354	1-249-425-11	CARBON 4.7K 5%	1/4W F
R355	1-249-425-11	CARBON 4.7K 5%	1/4W F
R356	1-249-425-11	CARBON 4.7K 5%	1/4W F
R357	1-249-441-11	CARBON 100K 5%	1/4W
R358	1-249-441-11	CARBON 100K 5%	1/4W
R359	1-249-425-11	CARBON 4.7K 5%	1/4W F

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
R360	1-247-843-11	CARBON	3.3K 5% 1/4W	R620	1-249-419-11	CARBON	1.5K 5% 1/4W F
R361	1-249-429-11	CARBON	10K 5% 1/4W	R621	1-249-426-11	CARBON	5.6K 5% 1/4W
R362	1-249-429-11	CARBON	10K 5% 1/4W	△ R622	1-249-403-11	CARBON	68 5% 1/4W F
R363	1-249-411-11	CARBON	330 5% 1/4W	R623	1-249-437-11	CARBON	47K 5% 1/4W
R401	1-249-411-11	CARBON	330 5% 1/4W	R630	1-249-426-11	CARBON	5.6K 5% 1/4W
R402	1-249-421-11	CARBON	2.2K 5% 1/4W F	R631	1-247-887-00	CARBON	220K 5% 1/4W (DE415)
R403	1-249-417-11	CARBON	1K 5% 1/4W F	R632	1-249-426-11	CARBON	5.6K 5% 1/4W
R404	1-249-417-11	CARBON	1K 5% 1/4W F	R651	1-249-417-11	CARBON	1K 5% 1/4W F
R405	1-249-417-11	CARBON	1K 5% 1/4W F	R652	1-249-439-11	CARBON	68K 5% 1/4W
R406	1-249-417-11	CARBON	1K 5% 1/4W F	R653	1-249-414-11	CARBON	560 5% 1/4W F
R407	1-249-417-11	CARBON	1K 5% 1/4W F	R654	1-249-439-11	CARBON	68K 5% 1/4W
R408	1-249-429-11	CARBON	10K 5% 1/4W	R655	1-249-441-11	CARBON	100K 5% 1/4W
R409	1-249-437-11	CARBON	47K 5% 1/4W	R660	1-249-421-11	CARBON	2.2K 5% 1/4W F
R410	1-247-897-11	CARBON	560K 5% 1/4W	R661	1-249-437-11	CARBON	47K 5% 1/4W
R411	1-249-416-11	CARBON	820 5% 1/4W F	R663	1-249-414-11	CARBON	560 5% 1/4W F
R412	1-247-897-11	CARBON	560K 5% 1/4W	△ R664	1-249-409-11	CARBON	220 5% 1/4W F
R413	1-249-437-11	CARBON	47K 5% 1/4W	△ R665	1-249-409-11	CARBON	220 5% 1/4W F
R414	1-249-425-11	CARBON	4.7K 5% 1/4W F	△ R666	1-233-352-41	ENCAPSULATED COMPONENT	
R415	1-249-417-11	CARBON	1K 5% 1/4W F	△ R667	1-249-393-11	CARBON	10 5% 1/4W F
R416	1-249-417-11	CARBON	1K 5% 1/4W F	R668	1-249-389-11	CARBON	4.7 5% 1/4W F
R417	1-247-897-11	CARBON	560K 5% 1/4W	R670	1-249-419-11	CARBON	1.5K 5% 1/4W F
R420	1-249-441-11	CARBON	100K 5% 1/4W	R671	1-249-426-11	CARBON	5.6K 5% 1/4W
R435	1-249-418-11	CARBON	1.2K 5% 1/4W F	R672	1-249-431-11	CARBON	15K 5% 1/4W
R442	1-249-418-11	CARBON	1.2K 5% 1/4W F	R673	1-249-437-11	CARBON	47K 5% 1/4W
R443	1-249-418-11	CARBON	1.2K 5% 1/4W F	R701	1-249-417-11	CARBON	1K 5% 1/4W F
R447	1-249-416-11	CARBON	820 5% 1/4W F	R702	1-249-439-11	CARBON	68K 5% 1/4W
R448	1-249-429-11	CARBON	10K 5% 1/4W	R703	1-249-414-11	CARBON	560 5% 1/4W F
R449	1-247-863-91	CARBON	22K 5% 1/4W	R704	1-249-439-11	CARBON	68K 5% 1/4W
R451	1-249-411-11	CARBON	330 5% 1/4W	R705	1-249-441-11	CARBON	100K 5% 1/4W
R452	1-249-421-11	CARBON	2.2K 5% 1/4W F	R710	1-249-421-11	CARBON	2.2K 5% 1/4W F
R453	1-249-417-11	CARBON	1K 5% 1/4W F	R711	1-249-437-11	CARBON	47K 5% 1/4W
R454	1-249-417-11	CARBON	1K 5% 1/4W F	R713	1-249-414-11	CARBON	560 5% 1/4W F
R455	1-249-417-11	CARBON	1K 5% 1/4W F	△ R714	1-249-409-11	CARBON	220 5% 1/4W F
R456	1-249-417-11	CARBON	1K 5% 1/4W F	△ R715	1-249-409-11	CARBON	220 5% 1/4W F
R457	1-249-417-11	CARBON	1K 5% 1/4W F	△ R716	1-233-352-41	ENCAPSULATED COMPONENT	
R458	1-249-429-11	CARBON	10K 5% 1/4W	△ R717	1-249-393-11	CARBON	10 5% 1/4W F
R459	1-249-437-11	CARBON	47K 5% 1/4W	R718	1-249-389-11	CARBON	4.7 5% 1/4W F
R460	1-247-897-11	CARBON	560K 5% 1/4W	△ R719	1-249-405-11	CARBON	100 5% 1/4W F
R461	1-249-416-11	CARBON	820 5% 1/4W F	R720	1-249-419-11	CARBON	1.5K 5% 1/4W F
R462	1-247-897-11	CARBON	560K 5% 1/4W	R721	1-249-426-11	CARBON	5.6K 5% 1/4W
R463	1-249-437-11	CARBON	47K 5% 1/4W	△ R722	1-249-403-11	CARBON	68 5% 1/4W F
R465	1-249-417-11	CARBON	1K 5% 1/4W F	R723	1-249-437-11	CARBON	47K 5% 1/4W
R466	1-249-417-11	CARBON	1K 5% 1/4W F	R724	1-249-425-11	CARBON	4.7K 5% 1/4W F
R467	1-247-897-11	CARBON	560K 5% 1/4W	R725	1-249-429-11	CARBON	10K 5% 1/4W
R470	1-249-441-11	CARBON	100K 5% 1/4W	R726	1-249-417-11	CARBON	1K 5% 1/4W F
R473	1-249-437-11	CARBON	47K 5% 1/4W	R727	1-249-427-11	CARBON	6.8K 5% 1/4W F
R601	1-249-417-11	CARBON	1K 5% 1/4W F	R730	1-249-429-11	CARBON	10K 5% 1/4W
R602	1-249-439-11	CARBON	68K 5% 1/4W	R731	1-247-887-00	CARBON	220K 5% 1/4W (DE415)
R603	1-249-414-11	CARBON	560 5% 1/4W F	R734	1-249-429-11	CARBON	10K 5% 1/4W (DE415)
R604	1-249-439-11	CARBON	68K 5% 1/4W	△ R740	1-249-393-11	CARBON	10 5% 1/4W F
R605	1-249-441-11	CARBON	100K 5% 1/4W	△ R741	1-249-393-11	CARBON	10 5% 1/4W F
R610	1-249-421-11	CARBON	2.2K 5% 1/4W F	R742	1-249-425-11	CARBON	4.7K 5% 1/4W F
R611	1-249-437-11	CARBON	47K 5% 1/4W	R743	1-249-425-11	CARBON	4.7K 5% 1/4W F
R613	1-249-414-11	CARBON	560 5% 1/4W F	R751	1-249-417-11	CARBON	1K 5% 1/4W F
△ R614	1-249-409-11	CARBON	220 5% 1/4W F	R752	1-249-439-11	CARBON	68K 5% 1/4W
△ R615	1-249-409-11	CARBON	220 5% 1/4W F				
△ R616	1-233-352-41	ENCAPSULATED COMPONENT					
△ R617	1-249-393-11	CARBON	10 5% 1/4W F				
R618	1-249-389-11	CARBON	4.7 5% 1/4W F				
△ R619	1-249-405-11	CARBON	100 5% 1/4W F				

The components identified by mark △ or dotted line with mark △ are critical for safety.  
Replace only with part number specified.



<b>MAIN</b>	<b>MIX</b>	<b>PRIMARY</b>	<b>SECONDARY</b>	<b>STBY</b>
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Ref. No.	Part No.	Description	Remarks
R753	1-249-414-11	CARBON 560 5%	1/4W F
R754	1-249-439-11	CARBON 68K 5%	1/4W
R755	1-249-441-11	CARBON 100K 5%	1/4W
R760	1-249-421-11	CARBON 2.2K 5%	1/4W F
R761	1-249-437-11	CARBON 47K 5%	1/4W
R763	1-249-414-11	CARBON 560 5%	1/4W F
△ R764	1-249-409-11	CARBON 220 5%	1/4W F
△ R765	1-249-409-11	CARBON 220 5%	1/4W F
△ R766	1-233-352-41	ENCAPSULATED COMPONENT	
△ R767	1-249-393-11	CARBON 10 5%	1/4W F
R768	1-249-389-11	CARBON 4.7 5%	1/4W F
R770	1-249-419-11	CARBON 1.5K 5%	1/4W F
R771	1-249-426-11	CARBON 5.6K 5%	1/4W
R772	1-249-431-11	CARBON 15K 5%	1/4W
R773	1-249-437-11	CARBON 47K 5%	1/4W
R781	1-247-887-00	CARBON 220K 5%	1/4W (DE415)
△ R803	1-249-389-11	CARBON 4.7 5%	1/4W F
R804	1-249-421-11	CARBON 2.2K 5%	1/4W F
R821	1-249-437-11	CARBON 47K 5%	1/4W
R822	1-249-425-11	CARBON 4.7K 5%	1/4W F
R823	1-249-437-11	CARBON 47K 5%	1/4W
R824	1-249-425-11	CARBON 4.7K 5%	1/4W F
R825	1-249-407-11	CARBON 150 5%	1/4W F
△ R830	1-249-405-11	CARBON 100 5%	1/4W F
△ R831	1-249-403-11	CARBON 68 5%	1/4W F
R950	1-249-421-11	CARBON 2.2K 5%	1/4W F
R951	1-249-429-11	CARBON 10K 5%	1/4W
R952	1-247-843-11	CARBON 3.3K 5%	1/4W
R953	1-247-863-91	CARBON 22K 5%	1/4W
R954	1-249-439-11	CARBON 68K 5%	1/4W
R955	1-249-429-11	CARBON 10K 5%	1/4W
R956	1-247-843-11	CARBON 3.3K 5%	1/4W
R957	1-249-417-11	CARBON 1K 5%	1/4W F
R958	1-249-401-11	CARBON 47 5%	1/4W F
R960	1-249-429-11	CARBON 10K 5%	1/4W
< RELAY >			
RY601	1-515-921-11	RELAY (12V)	
RY701	1-515-921-11	RELAY (12V)	
RY801	1-755-013-11	RELAY	
< TERMINAL >			
TM1	1-694-266-11	TERMINAL BOARD, ANT (ANTENNA)	
TM601	1-537-510-11	TERMINAL BOARD (SPEAKER) (6P) (SURROUND SPEAKER)	
TM701	1-537-376-11	TERMINAL BOARD (SPEAKER) (FRONT SPEAKER)	
< TUNER >			
TU001	1-233-594-12	ENCAPSULATED COMPONENT (AEP,UK,G)	
TU001	1-233-595-11	ENCAPSULATED COMPONENT (EE)	
< VIBRATOR >			
X1	1-579-900-21	VIBRATOR, CRYSTAL 4.33MHz	
X301	1-579-952-21	VIBRATOR, CERAMIC 8MHz	

Ref. No.	Part No.	Description	Remarks
*	1-666-496-11	MIX BOARD (DE415)	*****
< CONNECTOR >			
CNS253	1-691-765-11	PLUG (MICRO CONNECTOR) 3P (DE415)	
< JACK >			
J253	1-774-843-11	JACK, PIN 1P (MIX)(DE415)	
*****			
*	1-665-273-11	PRIMARY BOARD	*****
< FUSE >			
△ F901	1-532-259-00	FUSE TIME LAG 1.6A	*****
< FUSE >			
*	1-665-274-11	SECONDARY BOARD	*****
< CONNECTOR >			
CNP801	1-764-480-11	PIN, CONNECTOR (PC BOARD) 11P	
< RESISTOR >			
△ R810	1-249-381-11	CARBON 1 5%	1/4W F
△ R811	1-249-381-11	CARBON 1 5%	1/4W F
*****			
*	1-665-272-11	STBY BOARD	*****
< FUSE >			
1-533-233-11	HOLDER, FUSE		
< CONNECTOR >			
CNP802	1-779-495-11	PLUG, CONNECTOR PIN 4P	
CNP901	1-564-321-00	PIN, CONNECTOR 2P	
CNP903	1-580-230-11	PIN, CONNECTOR (PC BOARD) 2P (AEP,G,EE)	
< DIODE >			
D816	8-719-815-85	DIODE 1S1585	
< FUSE >			
△ F902	1-532-286-00	FUSE TIME LAG 2.5A (AEP,G,EE)	
< RELAY >			
△ RY901	1-515-720-11	RELAY	
< TRANSFORMER >			
△ T902	1-450-358-11	TRANSFORMER, POWER	*****

The components identified by mark △ or dotted line with mark △ are critical for safety.  
Replace only with part number specified.

## SW

## SW (A)

## SW (B)

## VOLUME

## VR-TONE

Ref. No.	Part No.	Description	Remarks				Ref. No.	Part No.	Description	Remarks					
*	A-4392-965-A	SW BOARD, COMPLETE					< CONNECTOR >								
		*****					CNP202	1-770-391-11	PIN, CONNECTOR (PC BOARD) 7P						
		SW (A) BOARD					CNS402	1-568-439-11	SOCKET, CONNECTOR 7P						
		*****					CNS403	1-568-442-11	SOCKET, CONNECTOR 9P						
		SW (B) BOARD					< DIODE >								
		*****					D238	8-719-313-50	DIODE SEL6810A-TH12 (BASS BOOST)						
		< CONNECTOR >					D421	8-719-815-85	DIODE 1S1585						
		CNP703	1-764-474-11	PIN, CONNECTOR (PC BOARD) 5P					< IC >						
		CNP704	1-764-473-11	PIN, CONNECTOR (PC BOARD) 3P					IC404	8-759-636-74	IC M5218AP-22				
		CNS205	1-770-397-11	HOUSING, CONNECTOR(PC BOARD)4P					< TRANSISTOR >						
CNS702	1-770-378-11	CONNECTOR, BOARD TO BOARD 5P					Q401	8-729-202-67	TRANSISTOR 2SK246-GR3						
		< JACK >					Q402	8-729-141-30	TRANSISTOR 2SC3623A-LK						
		J741	1-750-733-11	JACK (LARGE TYPE) (PHONES)					Q451	8-729-202-67	TRANSISTOR 2SK246-GR3				
		< RESISTOR >					Q452	8-729-141-30	TRANSISTOR 2SC3623A-LK						
		R741	1-260-100-11	CARBON	1.2K	5%	1/2W	< RESISTOR >							
		R742	1-260-100-11	CARBON	1.2K	5%	1/2W	R420	1-249-415-11	CARBON	680	5%	1/4W	F	
		R791	1-260-100-11	CARBON	1.2K	5%	1/2W	R421	1-249-430-11	CARBON	12K	5%	1/4W		
		R792	1-260-100-11	CARBON	1.2K	5%	1/2W	R422	1-249-422-11	CARBON	2.7K	5%	1/4W	F	
		< SWITCH >					R423	1-247-903-00	CARBON	1M	5%	1/4W			
		S701	1-762-319-11	SWITCH, PUSH (2 KEY) (SPEAKERS)					R424	1-247-903-00	CARBON	1M	5%	1/4W	
		*****													
*	A-4392-964-A	VR-TONE BOARD, COMPLETE					R425	1-249-429-11	CARBON	10K	5%	1/4W			
		*****					R426	1-249-439-11	CARBON	68K	5%	1/4W			
		VOLUME BOARD					R427	1-249-417-11	CARBON	1K	5%	1/4W	F		
		*****					R430	1-249-437-11	CARBON	47K	5%	1/4W			
		< CAPACITOR >					R431	1-247-843-11	CARBON	3.3K	5%	1/4W			
		C420	1-162-207-31	CERAMIC	22PF	5%	50V	R432	1-247-883-00	CARBON	150K	5%	1/4W		
		C421	1-137-440-11	FILM	0.018uF	5%	50V	R433	1-249-427-11	CARBON	6.8K	5%	1/4W	F	
		C422	1-124-463-00	ELECT	0.1uF	20%	50V	R434	1-249-413-11	CARBON	470	5%	1/4W	F	
		C423	1-137-368-11	FILM	0.0047uF	5%	50V	R438	1-249-441-11	CARBON	100K	5%	1/4W		
		C424	1-137-372-11	FILM	0.022uF	5%	50V	R441	1-249-441-11	CARBON	100K	5%	1/4W		
		C425	1-126-096-11	ELECT	10uF	20%	35V	R444	1-247-903-00	CARBON	1M	5%	1/4W		
		C426	1-126-096-11	ELECT	10uF	20%	35V	R464	1-247-903-00	CARBON	1M	5%	1/4W		
		C427	1-124-252-00	ELECT	0.33uF	20%	50V	R469	1-247-903-00	CARBON	1M	5%	1/4W		
		C428	1-130-489-00	MYLAR	0.033uF	5%	50V	R470	1-249-415-11	CARBON	680	5%	1/4W	F	
		C429	1-102-973-00	CERAMIC	100PF	5%	50V	R471	1-249-430-11	CARBON	12K	5%	1/4W		
		C430	1-126-301-11	ELECT	1uF	20%	50V	R472	1-249-422-11	CARBON	2.7K	5%	1/4W	F	
		C431	1-126-301-11	ELECT	1uF	20%	50V	R473	1-247-903-00	CARBON	1M	5%	1/4W		
		C432	1-126-096-11	ELECT	10uF	20%	35V	R474	1-247-903-00	CARBON	1M	5%	1/4W		
		C433	1-126-096-11	ELECT	10uF	20%	35V	R475	1-249-429-11	CARBON	10K	5%	1/4W		
		C470	1-162-207-31	CERAMIC	22PF	5%	50V	R476	1-249-439-11	CARBON	68K	5%	1/4W		
		C471	1-137-440-11	FILM	0.018uF	5%	50V	R477	1-249-417-11	CARBON	1K	5%	1/4W	F	
		C472	1-124-463-00	ELECT	0.1uF	20%	50V	R480	1-249-437-11	CARBON	47K	5%	1/4W		
		C473	1-137-368-11	FILM	0.0047uF	5%	50V	R481	1-247-843-11	CARBON	3.3K	5%	1/4W		
		C474	1-137-372-11	FILM	0.022uF	5%	50V	R482	1-247-883-00	CARBON	150K	5%	1/4W		
		C475	1-126-096-11	ELECT	10uF	20%	35V	R483	1-249-427-11	CARBON	6.8K	5%	1/4W	F	
		C476	1-126-096-11	ELECT	10uF	20%	35V	R484	1-249-413-11	CARBON	470	5%	1/4W	F	
		C477	1-124-252-00	ELECT	0.33uF	20%	50V	R491	1-249-441-11	CARBON	100K	5%	1/4W		
		C478	1-130-489-00	MYLAR	0.033uF	5%	50V	R492	1-247-903-00	CARBON	1M	5%	1/4W		
		C479	1-102-973-00	CERAMIC	100PF	5%	50V	R494	1-247-903-00	CARBON	1M	5%	1/4W		
		C492	1-124-464-11	ELECT	0.22uF	20%	50V	< VARIABLE RESISTOR >							
		C601	1-126-163-11	ELECT	4.7uF	20%	50V	RV404	1-225-229-11	RES, VAR, CARBON 100KX4	(MASTER VOLUME)				
		C651	1-126-163-11	ELECT	4.7uF	20%	50V	RV421	1-223-362-11	RES, VAR, CARBON 100K/100K (BASS)					
		C701	1-126-163-11	ELECT	4.7uF	20%	50V	RV422	1-223-363-11	RES, VAR, CARBON 125K/125K (TREBLE)					
		C751	1-126-163-11	ELECT	4.7uF	20%	50V	RV423	1-225-447-11	RES, VAR, CARBON 100K/100K (BALANCE)					

VOLUME

VR-TONE

Ref. No.	Part No.	Description	Remarks
		< SWITCH >	
S240	1-554-937-11	SWITCH, KEY BOARD (BASS BOOST)	
*****			
		MISCELLANEOUS	
*****			
11	1-769-908-11	WIRE (FLAT TYPE) (9 CORE)	
12	1-765-314-11	WIRE (FLAT TYPE) (7 CORE)	
61	1-773-252-11	WIRE (FLAT TYPE) (27 CORE)	
△ 71	1-751-520-11	CORD, POWER (UK)	
△ 71	1-769-744-11	CORD, POWER (AEP,G,EE)	
△ CNJ903	1-526-794-11	OUTLET, AC (AEP,G,EE)	
△ T901	1-431-260-11	TRANSFORMER, POWER (DE315)	
△ T901	1-431-266-11	TRANSFORMER, POWER (DE415)	
*****			

Ref. No.	Part No.	Description	Remarks
		ACCESSORIES & PACKING MATERIALS	
*****			
	1-475-042-11	ADAPTOR (21PIN D. SUB)	
	1-475-136-21	REMOTE COMMANDER (RM-U301) (DE315)	
	1-475-137-11	REMOTE COMMANDER (RM-P301) (DE415)	
	1-501-374-11	ANTENNA, LOOP	
	1-501-594-11	ANTENNA (FM)	
	3-859-657-11	MANUAL, INSTRUCTION	
		(ENGLISH/FRENCH/GERMAN/DUTCH/ITALIAN)(AEP,UK,G)	
	3-859-657-41	MANUAL, INSTRUCTION	
		(SPANISH/SWEDISH/FRENCH/DANISH/PORTUGUESE)(AEP)	
	3-859-657-51	MANUAL, INSTRUCTION	
		(ENGLISH/RUSSIAN/POLISH)(EE)	
	4-981-643-01	COVER, BATTERY (for RM-P301/U301)	
*****			
*****			
HARDWARE LIST			
*****			
#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	
#2	7-685-881-09	SCREW +BVTT 4X8 (S)	
#3	7-685-872-09	SCREW +BVTT 3X8 (S)	
#4	7-658-646-71	SCREW +BTP 3X8	

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